# **Class Title: Senior Traffic Engineer**

#### **BRIEF DESCRIPTION OF THE CLASSIFICATION:**

Manages the efficient design, operation and maintenance of the central traffic signal network. Provides technical support, and manages the development, design and implementation of construction projects.

#### **ESSENTIAL FUNCTIONS:**

This information is intended to be descriptive of the key responsibilities of the classification. The following examples do not identify all duties performed by any single incumbent. Specific requirements of individual positions are described in the Job Description.

	Physical Strength Code	ESSENTIAL FUNCTIONS
1	S	Facilitates construction projects by preparing scope of services, estimates, plans, specifications, and projects, preparing and administering budgets and contracts, reviewing plans to ensure proper compliance with standards, and developing new standards.
2	L	Designs and/or Provides technical support by disseminating information regarding traffic signals, roadway projects, guardrails, traffic control, telecommunications, and civil engineering, collecting traffic signal data, and serving as an expert witness on traffic signal matters.
3	S	Manages the smart traffic center by developing, scheduling and planning work tasks of staff, ordering supplies, preparing budgets, preparing briefings, and maintaining records of system parameters.
4	S	Conducts traffic studies and prepares documentation and presentations by analyzing and evaluating traffic data, recommending safety devices, improvements to traffic signals, and capitol improvement projects.
5	S	Provides public information by attending local and regional committees as a representative of the city, participating in public forums, preparing administrative resolutions and ordinances related to projects, negotiationg contract agreements and developing program goals and objectives.

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# **CLASS REQUIREMENTS:**

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Formal Education / Knowledge	Work requires broad knowledge in a general professional or technical field. Knowledge is normally acquired through four years of college resulting in a Bachelor's degree or equivalent in engineering.			
Experience	Three years experience.			
Certifications and Other Requirements	Valid Driver's License, Professional Engineer License, Engineer in Training Certificate preferred.			
Reading	Work requires the ability to read technical manuals, correspondence, reports, plans, specifications, software documentation, contracts, and legal documents.			
Math	Work requires the ability to perform general math calculations such as addition, subtraction, multiplication and division, algebra, geometry, and statistics.			
Writing	Work requires the ability to write specifications, contracts, correspondence, field notes, presentations, and reports.			
Managerial	Managerial responsibilities include developing policies and procedures, and planning, budgeting, scheduling and coordinating projects.			
Budget Responsibility	Researches documents, compiles data for computer entry, and oversees data entry and has responsibility for monitoring budget expenditures (typically non-discretionary expenditures) for a work unit of less than bureau size.			
Supervisory / Organizational Control	Work requires supervising and monitoring performance for a regular group of employees in a work unit including providing input on hiring/disciplinary actions and work objectives/effectiveness, and realigning work as needed.			
Complexity	Work is governed by broad instructions, objectives and policies. Work requires the exercise of considerable initiative and independent analytical and evaluative judgment.			
Interpersonal / Human Relations Skills	Contacts others within the organization. These contacts may involve similar work units or departments within the City which may be involved in decision making or providing approval or decision making authority for purchases or projects. Works with individuals outside the City who may belong to professional or peer organizations. Working with various state and federal agencies may also be required. Vendors and suppliers may also be called upon for information on purchases, supplies or products. Meetings and discussions may be conducted with customers, brokers, sales representatives and the general public.			

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# **OVERALL PHYSICAL STRENGTH DEMANDS:**

Sedentary X	Light	Medium	Heavy	Very Heavy
S = Sedentary Exerting up to 10 lbs. occasionally or negligible weights frequently; sitting most of the time	L = Light Exerting up to 20 lbs. occasionally, 10 lbs. frequently, or negligible amounts constantly OR requires walking or standing to a significant degree.	M = Medium Exerting 20-50 lbs. occasionally, 10-25 lbs. frequently, or up to 10 lbs. constantly.	H = Heavy Exerting 50-100 lbs. occasionally, 25-50 lbs. frequently, or up to 10-20 lbs. constantly.	VH = Very Heavy Exerting over 100 lbs. occasionally, 50-100 lbs. frequently, or up to 20-50 lbs. constantly.

## **PHYSICAL DEMANDS:**

C = Continuously	F = Frequently	O = Occasionally	R = Rarely	N = Never
2/3 or more of the time.	From 1/3 to 2/3 of the time.	Up to 1/3 of the time.	Less than 1 hour per week.	Never occurs.

This is a description of the way the job is currently performed; it does not address the potential for accommodation.

PHYSICAL DEMANDS	FREQUENCY CODE	DESCRIPTION
Standing	F	Office equipment, filing, presentations, observation, inspection or supervision
Sitting	F	Computer, desk work, meetings, answering telephone, driving
Walking	F	To/from meetings, to/from job sites, to/from office equipment, at crosswalks
Lifting	О	Laptop computer, traffic controllers, books, manuals, office supplies, files, folders
Carrying	0	Laptop computer, traffic controllers, books, manuals, office supplies, files, folders
Pushing/Pulling	О	Desk drawers, file cabinet drawers
Reaching	F	Documents in file cabinet drawers, overhead lockers
Handling	F	Computer components, test equipment, laptop, traffic controllers, books, files
Fine Dexterity	0	Computer keyboard, calculator, writing, joystick control on CCTV
Kneeling	0	Observation of junction boxes
Crouching	0	Observation of junction boxes
Crawling	R	Observation of junction boxes
Bending	О	Observation of junction boxes, computer operations
Twisting	0	Observation of junction boxes, to/from telephone to computer
Climbing	R	Stairs
Balancing	N	
Vision	С	Computer, desk work, reading, inspections, supervision, monitors, traffic, driving
Hearing	С	Telephone, staff, supervisor, various DOT contacts, vendors, meetings, presentations
Talking	F	Telephone, staff, supervisor, various DOT contacts, vendors, meetings, presentations
Foot Controls	0	Driving
Other (specify)	N	

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## MACHINES, TOOLS, EQUIPMENT, AND WORK AIDS:

Computer, laser or inkjet printer, copy machine, fax machine, telephone, Standard Windows and Office software, UNIX, IRIX 6.0, Arc View, Bitran, Quicknet, Dbase, Printshop or Paint programs, Snynchrosimtraffic software, stop watch, voltmeter, overhead projector, small hand tools, Corsim, HCM

#### **ENVIRONMENTAL FACTORS:**

D = Daily	W = Several	M = Several	S = Seasonally	N = Never
	Times Per Week	Times Per Month		

HEALTH AND SAFETY		ENVIRONMENTAL FACTO	ORS
Mechanical Hazards	M	Dirt and Dust	M
Chemical Hazards	N	Extreme Temperatures	S
Electrical Hazards	W	Noise and Vibration	W
Fire Hazards	N	Fumes and Odors	W
Explosives	N	Wetness/Humidity	S
Communicable Diseases	N	Darkness or Poor Lighting	M
Physical Danger or Abuse	N		
Other (see 1 helow)	N		

PRIMARY WORK LOCATION		
Office Environment	X	
Warehouse		
Shop		
Vehicle		
Outdoors		
Other (see 2 below)		

(1)

(2)

#### **PROTECTIVE EQUIPMENT REQUIRED:**

Hard hat, safety vest, steel toed shoes, safety glasses

## **NON-PHYSICAL DEMANDS:**

C = Continuously	F = Frequently	O = Occasionally	R = Rarely	N = Never
2/3 or more of the time.	From $1/3$ to $2/3$ of the time.	Up to 1/3 of the time.	Less than 1 hour per week.	Never occurs.

NON-PHYSICAL DEMANDS	
Time Pressures	F
Emergency Situations	O
Frequent Change of Tasks	F
Irregular Work Schedule/Overtime	O
Performing Multiple Tasks Simultaneously	C
Working Closely with Others as Part of a Team	F
Tedious or Exacting Work	O
Noisy/Distracting Environment	R
Other (see 3 below)	N

(3)

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